

## Complete Summary

---

### GUIDELINE TITLE

Practice advisory for preanesthesia evaluation: a report by the American Society of Anesthesiologists Task Force on Preanesthesia Evaluation.

### BIBLIOGRAPHIC SOURCE(S)

American Society of Anesthesiologists Task Force on Preanesthesia Evaluation. Practice advisory for preanesthesia evaluation: a report by the American Society of Anesthesiologists Task Force on Preanesthesia Evaluation. *Anesthesiology* 2002 Feb; 96(2):485-96. [198 references] [PubMed](#)

### GUIDELINE STATUS

This is the current release of the guideline.

## COMPLETE SUMMARY CONTENT

SCOPE  
 METHODOLOGY - including Rating Scheme and Cost Analysis  
 RECOMMENDATIONS  
 EVIDENCE SUPPORTING THE RECOMMENDATIONS  
 BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS  
 QUALIFYING STATEMENTS  
 IMPLEMENTATION OF THE GUIDELINE  
 INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT  
 CATEGORIES  
 IDENTIFYING INFORMATION AND AVAILABILITY  
 DISCLAIMER

## SCOPE

### DISEASE/CONDITION(S)

Any condition that requiring anesthesia for a surgical or non-surgical procedure

### GUIDELINE CATEGORY

Evaluation  
 Management

### CLINICAL SPECIALTY

Anesthesiology

## INTENDED USERS

Health Care Providers  
Physicians

## GUIDELINE OBJECTIVE(S)

To (1) assess the currently available evidence pertaining to the healthcare benefits of preanesthesia evaluation, (2) offer a reference framework for the conduct of preanesthesia evaluation by anesthesiologists, and (3) stimulate research strategies that can assess the healthcare benefits of a preanesthesia evaluation

## TARGET POPULATION

Patients of all ages who are scheduled to receive general anesthesia, regional anesthesia, or moderate or deep sedation for elective surgical and nonsurgical procedures

Note: The Advisory does not address the selection of anesthetic technique nor the preanesthesia evaluation of patients requiring urgent or emergency surgery or anesthetic management provided on an urgent basis in other locations (e.g., emergency rooms).

## INTERVENTIONS AND PRACTICES CONSIDERED

1. Review of medical records
2. Patient interview
3. Timing of pre-anesthetic assessment
4. Physical examination (minimum of airway, lungs, heart, with documentation of vital signs)
5. Selective pre-operative tests
  - Electrocardiogram (ECG)
  - Cardiac evaluation (other than ECG)
  - Chest radiographs
  - Pulmonary evaluation (other than chest X-ray)
  - Hemoglobin or hematocrit
  - Coagulation studies (e.g., international normalized ratio (INR), prothrombin time (PT), partial thromboplastin time (PTT), platelets)
  - Serum chemistries (i.e., potassium, glucose, sodium, renal and liver function studies)
  - Urinalysis
  - Pregnancy testing
6. Decision making parameters (for specific preoperative tests and timing of tests)

## MAJOR OUTCOMES CONSIDERED

- Perioperative outcomes (e.g., cardiac, respiratory, renal, hemorrhagic) relative to findings of preoperative evaluations
- Changes in clinical management

## METHODOLOGY

### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

### NUMBER OF SOURCE DOCUMENTS

Not stated

### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus

### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

### METHODS USED TO ANALYZE THE EVIDENCE

Review

### DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Practice advisories are developed by a systematic, consensus-based process. In contrast to evidence-based guidelines, practice advisories lack the support of a sufficient number of adequately controlled scientific studies to permit aggregate analyses of data with rigorous statistical techniques such as meta-analysis. Nonetheless, literature-based evidence for practice advisories is available from limited controlled trials, case reports, descriptive studies, and by the assessment of the strengths and weaknesses of published studies. This literature often permits the identification of recurring patterns of clinical practice. Opinion surveys often reveal similar patterns. The advisory statements contained in a practice advisory represent a consensus-based distillation of the clearest patterns of agreement or disagreement.

### METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

### DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The American Society of Anesthesiologists (ASA) appointed a task force of 12 members to (1) review published evidence; (2) obtain expert and public

consensus opinion; and (3) create a consensus-based assessment of currently available scientific literature and opinion. The ASA Task Force members consisted of anesthesiologists in both private and academic practices from various geographic areas of the United States, and methodologists from the ASA Committee on Practice Parameters.

The Task Force used a six-step process. First, they reached consensus on the criteria for evidence of effectiveness of preanesthesia evaluation. Second, original published research studies relevant to these issues were reviewed. Third, consultants who had expertise or interest in preanesthesia evaluation, and who practiced or worked in various settings (e.g., academic and private practice) were asked to (1) participate in opinion surveys on the effectiveness of various preanesthesia evaluation strategies, and (2) review and comment on draft reports of the Task Force. Fourth, opinions about various elements of this Practice Advisory were solicited from a random sample of active members of the ASA. Fifth, the Task Force held several open forums at major national anesthesia meetings to solicit input on the key concepts of this Advisory. Sixth, all available information was used to build consensus within the Task Force on the Advisory.

#### RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

#### COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

#### METHOD OF GUIDELINE VALIDATION

Peer Review

#### DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Consultants who had expertise or interest in pre-anesthesia evaluation and who practiced or worked in various settings (e.g., academic and private practice) were asked to review and comment on draft reports of the Task Force.

### RECOMMENDATIONS

#### MAJOR RECOMMENDATIONS

##### Summary and Conclusions

A preanesthesia evaluation involves the assessment of information from multiple sources, including medical records, patient interviews, physical examinations, and findings from preoperative tests.

The current scientific literature does not contain sufficiently rigorous information about the components of a preanesthesia evaluation to permit recommendations

that are unambiguously based. Therefore, the Task Force has relied primarily upon noncontrolled literature, opinion surveys of consultants, and opinion surveys of a random sample of members of the American Society of Anesthesiologists (ASA). The focus of opinion surveys has been threefold (1) the content of the preanesthesia evaluation, (2) the timing of the preoperative evaluation, and (3) the indications for specific preoperative tests.

The following remarks represent a synthesis of the opinion surveys, literature, and Task Force consensus:

1. Content of the preanesthesia evaluation includes but is not limited to (1) readily accessible medical records, (2) patient interview, (3) a directed preanesthesia examination, (4) preoperative tests when indicated, and (5) other consultations when appropriate. At a minimum, a directed preanesthesia physical examination should include an assessment of the airway, lungs, and heart.
2. Timing of the preanesthesia evaluation can be guided by considering combinations of surgical invasiveness and severity of disease, as shown in Table 2 of the original guideline document. The Task Force cautions that limitations in resources available to a specific healthcare system or practice environment may impact the timing of the preanesthesia evaluation. The healthcare system is obligated to provide pertinent information to the anesthesiologist for the appropriate assessment of the invasiveness of the proposed surgical procedure and the severity of the patient's medical condition well in advance of the anticipated day of procedure for all elective patients.
3. Routine preoperative tests (i.e., tests intended to discover a disease or disorder in an asymptomatic patient) do not make an important contribution to the process of perioperative assessment and management of the patient by the anesthesiologist.
4. Selective preoperative tests (i.e., tests ordered after consideration of specific information obtained from sources such as medical records, patient interview, physical examination, and the type or invasiveness of the planned procedure and anesthesia) may assist the anesthesiologist in making decisions about the process of perioperative assessment and management.
5. Decision-making parameters for specific preoperative tests or for the timing of preoperative tests cannot be unequivocally determined from the available scientific literature. Further research is needed, preferably in the form of appropriately randomized clinical trials. Specific tests and their timing should be individualized and based upon information obtained from sources such as the patient's medical record, patient interview, physical examination, and the type and invasiveness of the planned procedure.

#### CLINICAL ALGORITHM(S)

None provided

#### EVIDENCE SUPPORTING THE RECOMMENDATIONS

#### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The Task Force relied primarily upon noncontrolled literature, opinion surveys of consultants, and opinion surveys of a random sample of members of the American Society of Anesthesiologists (ASA).

## BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

### POTENTIAL BENEFITS

- Benefits of preoperative history and physical examination may include, but are not limited to, the safety of perioperative care, optimal resource utilization, improved outcomes, and patient satisfaction.
- Any evaluations, tests, and consultations required for a patient are done with the reasonable expectation that such activities will result in benefits that exceed the potential adverse effects. Potential benefits may include a change in the content or timing of anesthetic management or perioperative resource utilization that may improve the safety and effectiveness of anesthetic processes involved with perioperative care.

### POTENTIAL HARMS

Potential adverse effects may include interventions that result in injury, discomfort, inconvenience, delays, or costs that are not commensurate with the anticipated benefits.

## QUALIFYING STATEMENTS

### QUALIFYING STATEMENTS

- Practice advisories are systematically developed reports that are intended to assist decision-making in areas of patient care where scientific evidence is insufficient to develop an evidence-based model. Practice advisories provide a synthesis of opinion from experts, open forums, and other public sources. Practice advisories report the current state of scientific literature, but are not supported by literature to the same degree as standards or guidelines due to the lack of sufficient numbers of adequately controlled studies.
- Advisories are not intended as guidelines, standards, or absolute requirements. The use of practice advisories cannot guarantee any specific outcome. They may be adopted, modified, or rejected according to clinical needs and constraints. Practice advisories are subject to periodic revision as warranted by the evolution of medical knowledge, technology, and practice.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Getting Better  
Staying Healthy

### IOM DOMAIN

Effectiveness  
Safety

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

American Society of Anesthesiologists Task Force on Preanesthesia Evaluation. Practice advisory for preanesthesia evaluation: a report by the American Society of Anesthesiologists Task Force on Preanesthesia Evaluation. *Anesthesiology* 2002 Feb; 96(2):485-96. [198 references] [PubMed](#)

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2002 Feb

### GUIDELINE DEVELOPER(S)

American Society of Anesthesiologists - Medical Specialty Society

### SOURCE(S) OF FUNDING

American Society of Anesthesiologists

### GUIDELINE COMMITTEE

Task Force on Preanesthesia Evaluation

### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Task Force Members: L. Reuven Pasternak, MD (Chair), Baltimore, Maryland; James F. Arens, MD, Houston, Texas; Robert A. Caplan, MD, Seattle, Washington; Richard T. Connis, PhD, Woodinville, Washington; Lee A. Fleisher, MD, Baltimore, Maryland; Richard Flowerdew, MB, Portland, Maine; Barbara S. Gold, MD, Minneapolis, Minnesota; James F. Mayhew, MD, League City, Texas; David G.

Nickinovich, PhD, Bellevue, Washington; Linda Jo Rice, MD, St. Petersburg, Florida; Michael F. Roizen, MD, Chicago, Illinois; Rebecca S. Twersky, MD, Brooklyn, New York

#### FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

#### GUIDELINE STATUS

This is the current release of the guideline.

#### GUIDELINE AVAILABILITY

Electronic copies: [Available from the American Society for Anesthesiologists Web site.](#)

Print copies: Available from the American Society for Anesthesiologists, 520 North Northwest Highway, Park Ridge, IL 60068-2573.

#### AVAILABILITY OF COMPANION DOCUMENTS

None available

#### PATIENT RESOURCES

None available

#### NGC STATUS

This NGC summary was completed by ECRI on July 14, 2005. The information was verified by the guideline developer on July 20, 2005.

#### COPYRIGHT STATEMENT

This NGC summary is based on the original guideline, which is subject to the guideline developer's copyright restrictions.

### DISCLAIMER

#### NGC DISCLAIMER

The National Guideline Clearinghouse™ (NGC) does not develop, produce, approve, or endorse the guidelines represented on this site.

All guidelines summarized by NGC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public or private organizations, other government agencies, health care organizations or plans, and similar entities.



Guidelines represented on the NGC Web site are submitted by guideline developers, and are screened solely to determine that they meet the NGC Inclusion Criteria which may be found at <http://www.guideline.gov/about/inclusion.aspx>.

NGC, AHRQ, and its contractor ECRI make no warranties concerning the content or clinical efficacy or effectiveness of the clinical practice guidelines and related materials represented on this site. Moreover, the views and opinions of developers or authors of guidelines represented on this site do not necessarily state or reflect those of NGC, AHRQ, or its contractor ECRI, and inclusion or hosting of guidelines in NGC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding guideline content are directed to contact the guideline developer.

© 1998-2006 National Guideline Clearinghouse

Date Modified: 9/25/2006

